# **Annals of Clinical Case Reports**

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# **Appendicitis of the Stump: Report of a Case**

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# Abstract

**Background:** Stump appendicitis is a rare entity characterized by inflammation of the appendicular remnant, the clinical presentation can be subacute or chronic from 2 months to 50 years after appendectomy.

**Clinical Case:** 36-year-oldmale with a history of laparoscopic appendectomy 18 years prior to his admission, who presented abdominal pain located in the right iliac fossa, accompanied by abdominal distension and hyporexia, abdominal tomography was requested, confirming a picture compatible with appendicitis, performing laparoscopy in which appendicitis of the appendicular stump was evidenced, which was resected without complications.

**Conclusion:** It is important to keep this entity in mind when there is a suspicion of acute abdomen and a history of appendectomy, since the delay in diagnosis and treatment may increase morbidity and mortality.

Keywords: Appendicitis; Residual appendix; Appendectomy

## Introduction

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**Copyright** © 2022 Gonzalez-Q. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. Appendicitis of the stump is an uncommon pathology, its incidence is low, and it is believed to range from 0.002 to 0. It was first described in 1948 by Rose [1]. It is characterized by the presence of inflammation of the appendicular remnant, which should be considered in the differential diagnosis of abdominal pain and with a history of appendectomy in order to avoid complications that can compromise the patient's life, there is evidence of some factors that can favor an incomplete appendicectomy, from a complicated appendicitis, an inadequate exposure, surgical technique in which a remnant >5 mm is left and a long appendix [2].

The clinical picture can be acute or chronic, presenting from 2 months to 50 years postappendectomy, sometimes the history of appendectomy can delay the diagnosis allowing the progression of complications such as perforation, abscess or peritonitis [3,4].

The recommended imaging tests are ultrasound and CT of the abdomen and it is important that radiologists become familiar with this pathology, taking into account the most common entities that can be confused with stump appendicitis such as an epiploic appendix, terminal ileitis, inflammatory colitis, CT findings are generally those of a typical appendicitis, thickening of the cecal wall, striation of the pericecal fat, free pericecal fluid and in some cases the appendicular remnant can be visualized as a tubular structure with or without adjacent collection [1,5,6] the definitive diagnosis is made during the surgical procedure, when observing the appendicular remnant.

### **Case Presentation**

A 36-year-oldmale with a history of laparoscopic appendectomy 18 years ago came to the emergency department with abdominal pain of three days of evolution, cramping, located in the epigastrium and radiating to the right iliac fossa accompanied by abdominal distension and hyporexia, during the physical examination a painful abdomen was palpated, with muscular resistance, rebound positivo and McBurney positivo, abdominal tomography was requested in which inflammatory changes compatible with acute appendicitis were reported, he underwent laparoscopic surgery finding a plastron in the right iliac fossa with an appendicular stump which was released and resected with endoloops draining collection in the pelvic hollow (Figure 1), the patient had a favorable postoperative course and was discharged from the hospital 24 h later without complications. The pathology result reported mature adipose tissue with acute abscessed fibrinopurulent inflammation, compatible with appendicitis of the stump from previous surgery (Figure 2).

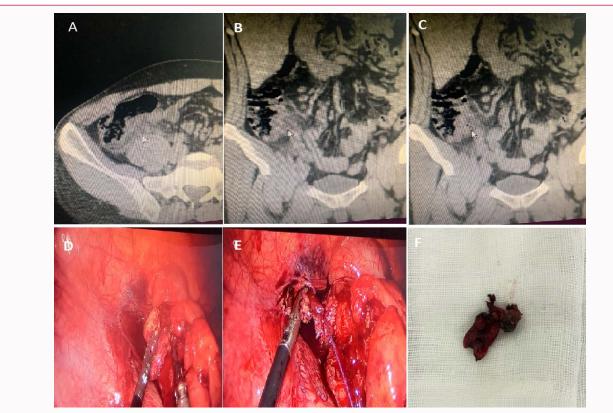


Figure 1: A, B and C) Tomography shows fat striation of the periappendicular region suggesting abscess. D and E) Laparoscopic surgery showing the appendicular stump and resection with endoloop F) Macroscopic image of the appendicular stump.

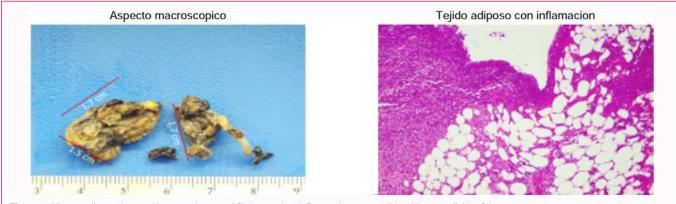


Figure 2: Mature adipose tissue with acute abscessed fibrinopurulent inflammation, compatible with appendicitis of the stump.

# Conclusion

To avoid this late complication of an appendectomy it is very important to visualize and dissect completely the appendicular cecum junction without leaving a long stump from the initial surgery because although this entity is rare it can become very serious if an early diagnosis and treatment is not performed and at the same time it decreases the risk of performing extended resections or converting to open surgery [7,8].

The definitive treatment is surgical either by laparoscopic or open surgery identifying the appendicular stump.

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